

**DECISION NOTICE**  
**FINDING OF NO SIGNIFICANT IMPACT**  
and  
**Non-Significant Forest Plan Amendment No. 46**  
**FOR THE**  
**JIM'S CREEK SAVANNA RESTORATION PROJECT**  
**ENVIRONMENTAL ASSESSMENT**

USDA Forest Service  
Willamette National Forest  
Middle Fork Ranger District  
46375 Highway 58.  
Westfir, OR 97492

The Jim's Creek Savanna Restoration Project Environmental Assessment (EA) documents the environmental analysis of a proposal to restore a portion of the Middle Fork Ranger District's Mixed Conifer forest type to its historic open condition. The project will restore and maintain an important component of biodiversity within the Willamette River basin. The project area is located in the Middle Fork of the Willamette River watershed about 18 miles south of the City of Oakridge, Oregon. The legal description of the area is sections 1, 2, 11, and 12 of T24S, R3E, Willamette Meridian, Lane County, Oregon.

The Jim's Creek Savanna Restoration Project was developed in accordance with direction provided in the 1990 Record of Decision and Final Environmental Impact Statement for the Land and Resource Management Plan for the Willamette National Forest (Forest Plan) as amended by the 1994 Record of Decision for Amendments to Forest Service And Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species within the Range of the Northern Spotted Owl (Northwest Forest Plan), and other appropriate laws and policies. The documents relating to this project are available for review at the Middle Fork Ranger District Office, 46375 Highway 58, Westfir, OR 97492, phone (541) 782-2283. I have reviewed the EA, related documents, and public input on this proposal. My decision is based upon that review. I have found the results of this analysis to be in full compliance with direction contained in the above documents with two minor exceptions that will require a non-significant Forest Plan amendment. This site-specific Plan amendment will exempt this project from five specific Forest Plan standards and guidelines, as further discussed below.

## Decision and Reasons for the Decision

It is my decision to implement **Alternative E** as described in the Jim's Creek Savanna Restoration Project EA. Alternative E restores the original open, savanna by removing excess mature trees using a commercial timber sale on about 455 acres to approximate the density this forest had about 100 years ago (less than 20 large trees per acre), as per the attached map. This equates to removing about 140 trees per acre, or about 87 percent of the existing trees. The 20 trees per acre to be retained will be, for the most part, the largest and oldest trees in the stands; in particular large ponderosa pine and mature oak trees will be retained. This alternative will also:

- remove excess trees using helicopter and cable yarding methods to protect soils and residual vegetation, heritage resources, and to avoid the need to construct additional roads;
- reduce fuels created by the tree removal by piling and burning;
- provide for planting of native Oregon white oak, understory grasses, and other native herbaceous vegetation;
- abate noxious weeds in meadows and along the existing road system;
- provide for meadow restoration (removal of encroaching small trees, planting of native species, and application of periodic prescribed fire),
- create snags, both in the areas of excess tree removal and in the two existing shelterwood harvested stands;
- reduce tree density in the four plantations;
- apply prescribed underburning in the four existing plantation, and eventually all treated areas to maintain the open character of the savanna, once planted oak trees attain a large enough stem size to allow them to survive the periodic underburning;
- maintain about 4.2 miles of existing system gravel roads by brushing, ditch cleaning, replacing 18 culverts, and surface gravel replacement;
- Close about 3 miles of system roads within the project area (roads 2129-367, 371, 375 and 435) once management activities are completed to improve wildlife habitat and reduce risks to water quality.

The alternative will yield an estimated 11.9 million board feet of wood products. No living trees present in the original savanna are proposed for removal. An average of 20 of the largest living trees on the site will be retained. In general, regardless of age, trees equal to or in excess of 24 inches in diameter at breast height will be retained. Pine and oak trees of any size will be retained, except as noted below. In one 16 acre area centered on the largest meadow, dense young pines encroaching upon the meadow will be thinned. Trees in the 100 year age class greater than 24 inches in diameter that are directly competing with mature pine or oak may also be removed. The spacing of retained trees will be quite variable and may result in creation of small openings up to an acre in size. Riparian Reserves along the eight class IV (intermittent) streams within the project area will have excess trees removed within them since these areas were once part of the original savanna, but a no-treatment buffer averaging about 50 feet either side of these ephemeral channels will be retained to protect channel stability and water quality. Fish bearing streams will be protected by the retention of undisturbed forest on slopes within 340 feet from such stream channels.

The Willamette National Forest has been granted Stewardship Contracting Authority for the Jim's Creek Savanna Restoration Project. It is my decision to implement the Jim's Creek Savanna Restoration

Project under that authority with a Stewardship Integrated Resource Timber Contract to provide for receipt retention as described below, and to allow incorporation of various services (such as non-merchantable tree removal) into the contract. Stewardship contracting authority allows receipts received from the sale of excess trees to be retained by this Forest to fund a variety of other restoration activities (such as road repair and closure, stream habitat enhancements, and upland wildlife habitat enhancement) within the identified 168,000 acre stewardship contracting area. This decision does not encompass those potential restoration activities. These actions will be identified by a collaborative group of interested parties which has yet to be convened. The effects of such restoration activities and the final decision as to which will be implemented will be covered in separate environmental analyses and decisions.

Implementation of Alternative E will not require any road construction but will require the construction of one helicopter landing, as indicated on the attached map. Existing roads within the project are will be maintained and repaired. These roads will be closed with gates, the road surface waterbarred, and the ditch lines reinforced to provide for long-term watershed protection while still allowing these roads to be used during the periodic underburning activities and other administrative purposes.

These activities are expected to begin in fiscal year 2007 and take about four years to complete; two years to complete the excess tree removal, one year to accomplish slash reduction and site preparation through burning, and one year to complete grass seeding and oak planting.

This alternative proposes activities that best meet the purpose and need for action described in Chapter 1 of the EA. The alternative was chosen because it accomplishes the following objectives better or more completely than other alternatives while addressing the significant issues.

- Alternative E provides for the most complete and comprehensive restoration of historic conditions and the greatest gains in biodiversity restoration in accordance with Forest Plan biodiversity standards and guidelines (page IV-78, FW-201). It will restore a habitat important to a variety of species of wildlife and a vegetation type important to cultural uses of the Native Americans. Their past use of prescribed fire helped to maintain the original savanna.
- It best addresses the public desire to see this landscape restored by restoring more acres than other alternatives.
- It provides a substantial and ecologically meaningful habitat block strategically located and large enough to achieve the desired fire regime. This will facilitate maintenance of important plant and wildlife habitat, and will limit the potential for introduction of non-native plants or damage to reestablished savanna vegetation as compared to staged entry alternatives.
- It provides for the most cost effective planning and natural resource restoration. It specifically provides for efficient fuels treatment and future application of prescribed fire, cost effective and efficient excess tree removal in one entry, as compared to staged entry alternatives.
- It brings the most acres towards the desired Fire Regime Condition Class (CC 1) by placing treatment boundaries on strategic locations for fire control. This will provide protection for the unique legacy conifers and Oregon white oak from catastrophic wild fire.
- It restores of a significantly large block of specific habitat (ponderosa pine and Oregon white oak savanna) that has become nearly non-existent on the Willamette National Forest and rare within the Willamette River basin as a whole (EA pages 11 and 13).
- It provides an important source of big game forage within a high emphasis Big Game Management Area (BGEA) in an area recreationally important for wildlife hunting and viewing. It begins an improving trend in overall big game habitat effectiveness for the BGEA.

- It provides the greatest opportunity for further restoration activities within the Upper Middle Fork and Hill's Creek Reservoir watersheds. It will provide the most receipts to be used for subsequent restoration activities, and the greatest opportunity for community involvement in Forest stewardship.
- It provides economic benefits to local economies and the public by producing approximately 11.9 million board feet of forest products. This will provide employment and income to the local communities, as will the expenditure of the timber sale receipts on other restoration projects.
- It will maintain and enhance a refugia for species associated with a pine and oak savanna in an area on the eastern and elevational periphery of the habitat type which may contain potentially unique genetic legacies for several tree species.

In addition to the more important objectives listed above, this alternative will provide for a diverse and unique trail hiking experience along the Young's Rock trail (#3685) by restoring this landscape to its once more open nature. It will begin an improving trend in watershed and wildlife habitat conditions by closing roads.

It is important to begin these restoration activities in this location because this landscape still contains residual savanna elements (Oregon white oaks, emergent conifer canopy trees, and native ground vegetation) and provides an outstanding opportunity to accomplish restoration successfully with relatively little concern for noxious weed invasion (EA pages 114-116). The project area provides an opportunity to accomplish restoration with minimal tradeoffs to other resource values because the historic condition of the site was an open, pine and oak savanna.

It is important to begin this restoration now because continuing forest succession will result in the loss of this vegetation type, particularly in this peripheral location. Loss of the mature pine and large oaks, which are the most time consuming ecosystem elements to replace, is ongoing. Additionally climate change may, in the future, create conditions favorable to the species we are preserving with these actions. This area may then serve as a refugia from which these species could colonize new habitat that could develop under a warmer and dryer climate regime in the western Cascades.

A majority of the project area is classified as Matrix lands by the Northwest Forest Plan (with the only exception being the riparian reserves). There are no inventoried roadless areas in the project area. I find that the road management decisions associated with this project are adequately informed by the Willamette National Forest Roads Analysis, the District's Supplemental Road Analysis, and are consistent with the current Forest Service transportation system policies (EA, page 202).

The selected alternative does not prevent attainment of the Aquatic Conservation Strategy objectives (as outlined in the 2004 Record of Decision Amending Resource Management Plans for Seven Bureau of Land Management Districts and Land and Resource Management Plans for Nineteen National Forests within the Range of the Northern Spotted Owl – Decision to Clarify Provisions Relating to the Aquatic Conservation Strategy) in the long-term within the 5<sup>th</sup> field Hills Creek Reservoir watershed (EA pages 80 and 81). By implementing associated mitigating measures (see below), Best Management Practices, and compliance with Forest Plan Standards and Guidelines, the proposal will insure protection of water quality and beneficial uses (EA pages 57 to 83).

The areas to be treated have been surveyed for all Survey and Manage species likely to occur in this type of habitat, in accordance to the 2001 Record of Decision for the Final Supplemental Environmental Impact Statement to Remove or Modify the Survey and Manage Mitigation Measures Standards and Guidelines. Those species were addressed in the Biological Evaluations and Assessments in the Analysis File and the effects summarized in the EA (pages 95, 117, 119, 162, and 163).

I have determined that the selected alternative is consistent with the Willamette National Forest Land and Resource Plan, as amended by the Northwest Forest Plan, with the specific exceptions noted below that will require a non-significant Forest Plan amendment. This finding is based on the content of the environmental analyses, in accordance with Forest Plan Management Area and Forest-Wide Standards and Guidelines, which are cited throughout the EA and associated documents. This EA provides a listing of how this proposal responds to the direction contained in the Forest Plan (EA, pages 42, 196, 197, 201, and 202).

I have considered all the effects contained in the EA and summarized in this Decision Notice. Some of these effects are positive while other are negative, though none are significantly so. I have made this decision with realization of the tradeoffs between desirable general biodiversity effects and small negative effects to specific resources. I recognize that we cannot provide all things on all acres. This project area appears to be the best place to provide for maintenance and restoration of landscape biodiversity associated with the pine and oak savanna, though in the process some late-successional forest values may be diminished.

### **Non-Significant Forest Plan Amendment**

As mentioned above, implementation of Alternative E requires amendment of the Forest Plan. This Alternative, and all action alternatives fully evaluated, do not fully comply with certain Forest Plan Forest-wide and Management Area standards and guidelines for trail and scenic corridor management, and its implementation requires a Forest Plan amendment as per 36CFR 219.10 (EA, pages 42-45 and 196-197). This Forest Plan amendment exempts this project from strict compliance with five specific Forest Plan standards and guidelines as discussed below. In a general sense the standards and guidelines referred to restrict the amount of even-aged harvest and size of harvest units within trail corridors and scenic allocations. The Jim's Creek Savanna Restoration proposal entails a different type of silvicultural technique and a more comprehensive landscape approach than anticipated by the Forest Plan and its prescriptions. The concept of restoration of historic, different forest habitat and conditions is not addressed in the Forest Plan standards and desired future conditions for trails and scenic resources.

The specific Forest Plan Standards and Guidelines that this alternative may not fully comply with follow, along with my reasoning as to why it is reasonable to exempt this project from compliance with them, follows:

#### **Trails**

FW-046: *scheduled even-aged harvest should not exceed 7% (for class III trails) within the trail corridor during the first ten years following plan implementation.*

FW-047: *the amount of trail frontage affected by harvest activities should be limited to 600 lineal feet per mile per ten year period.*

Alternative E harvests about 53% of the Class III trail corridor, and affects about 6896 feet of the trail length, equating to 71% of the entire class III trail segment. The restoration of the characteristic landscape requires the large area of harvest that is prescribed; the characteristic landscape could not be restored if harvest was limited to seven percent of the trail corridor per decade. I find that change to be an overall positive one. After short-term effects that will be evident until the native grass cover becomes established, this harvest will create a diverse hiking experience with enhanced views of large tree stems, surrounding ridges and valleys, and an increased diversity of flowering plants.

#### **Scenic Allocations**

MA-11c-05: *Maximum size of even-aged regeneration harvest units should be 15 acres.* If harvest units were limited to 15 acres in this area, the characteristic landscape could not be restored, and the

application of prescribed maintenance burning would be problematic and relatively cost inefficient to apply piece meal across harvest units that are less than 15 acres. The short-term impacts to visual quality will fade as the area takes on the appearance of a savanna.

MA-11d-08: *Maximum size of even-aged regeneration harvest units should be 8 acres. Roadside frontage zones in major travel corridors (I have determined that Road 21 does constitute such a corridor) should have a maximum unit size of 3 acres.* If harvest units were limited to 8 acres in this area the characteristic landscape could not be restored, and the application of prescribed burning would be problematic and relatively cost inefficient to apply piece meal across harvest units that are less than 15 acres. As stated above, short-term impacts to visual quality will fade as the savanna condition becomes established.

MA-11d-10: *stumps should be flush cut.* This foreground scenic management area extends up the slope above Road 21 (the feature this scenic corridor is centered on) as far as 450 feet. It is doubtful that most of stumps could be seen from the road at that distance. Additionally, a portion of the road frontage consists of vertical rock faces or steep cut slopes, and stumps above these cut banks cannot be readily seen from the road. Also, approximately two-thirds of this allocation in the foreground of Road 21 will be within the Middle Fork of the Willamette River riparian reserve and stumps above this untreated area but still with MA-11d would not be visible from the road in any case. I find that stumps on the edge of the road will be visible immediately after harvest but will soon be obscured by the planted native bunchgrass. The expense of flush-cutting stumps is not justified in this case.

## **Mitigating Measures**

The proposal includes mitigating measures to minimize or eliminate undesirable environmental effects, and Best Management Practices to ensure meeting standards and guidelines for water quality and soil stability (EA, pages 51-54). These measures and practices include:

- Helicopter yarding (as opposed to road construction and cable yarding) to protect cultural resources, water quality, and legacy trees, and to avoid soil disturbance and compaction;
- At least partial log suspension in areas not helicopter yarded to protect cultural resources, water quality, and legacy trees, and to avoid soil disturbance and compaction;
- Duff and slash pull back from all large pines and oak to protect cultural resources and legacy trees during prescribed fire activities;
- Riparian buffers to protect water temperature and clarity, channel stability, and to maintain wildlife dispersal habitat;
- Seasonal restrictions (3/1 to 7/15) on helicopter flight to avoid disturbance of spotted owls;
- Seasonal Restrictions (1/15 to 7/31) on helicopter flight outside of a direct line of flight between the log landing and the service landing (located on road 2129 about one mile west of the project area boundary) to avoid disturbance of peregrine falcons, depending upon occupancy and breeding status;
- Snag creation in all activity areas, including existing shelterwood stands, to maintain wildlife habitat;
- Cleaning of timber harvest, road maintenance, and culvert replacement machinery prior to entering the project area to avoid noxious weed introduction;
- Use of weed-free fill for road reconstruction and landing construction to avoid noxious weed introduction and spread;
- Covering of the St. Johnswort population at the helicopter landing location with plastic and either gravel or dirt prior to construction to prevent noxious weed spread;

- Treatment of noxious weeds prior to road use by manual and mechanical methods to restore general biodiversity and to prevent noxious weed spread;
- Revegetation of the project area (including closed roads) with native species after disturbances are completed to prevent soil erosion, noxious weed spread, protect water quality, and enhance biodiversity;
- Compliance with State smoke management guidelines during slash abatement to protect air quality;
- Slash burning under conditions where the duff moisture content is greater than 30 percent to protect soil productivity, riparian areas and cultural resources, and to reduce risk to legacy trees. Fuels created by the excess tree removal will be hand-piled and burned (rather than using the cheaper and more efficient broadcast burning) to minimize the risk of legacy tree damage and soil productivity decreases;
- No road construction would occur to prevent erosion, protect listed fish species, limit wildlife habitat disturbance, and protect cultural resources;
- Resurfacing of gravel roads to protect water quality;
- Road closure to minimize noxious weed spread, reduce water quality impacts, and prevent wildlife disturbance;
- Replacement of culverts that are not properly functioning or that are close to failure to protect water quality;
- Placement of sediment trapping structures in the Road 21 ditch line and the 2129.371 ditch line within 150 feet of their crossing of Jim's Creek during activities to protect water quality in the Middle Fork of the Willamette River;
- Yarding away from (not across) all stream channels, wetlands, and meadows to protect soil productivity, maintain biodiversity, and protect water quality;
- Directional felling of trees away from streams, meadow edges and cultural sites to protect water quality, maintain biodiversity and protect cultural resources;
- Documentation of dead, culturally modified trees that need to be felled for safety reasons to preserve important cultural information;
- Location of a clumped green tree retention area (see NWFP page C-41) on the north slope on the north edge of the project area (see Alternative map) to provide for connecting habitat for spotted owls and other late-successional forest dependant species, to mitigate for the creation of open forest, and to provide protection of this important habitat from prescribed burning.

Monitoring of project progress and effects will occur at many points in time during and after project completion, as detailed on pages 206 to 208 of the EA. This monitoring effort will include implementation monitoring during sale layout and preparation, sale administration, and contract inspections. The project will also be included in the list of sales with the potential to be sampled by Forest, Provincial, and Regional monitoring teams.

## **Significant Issues**

The following issues are identified as the significant issues for the project area based on the scoping, public comments received, and interdisciplinary team discussions. The significant issues were used to guide development of alternatives and are tracked through the analysis process. A brief, qualitative overview of the effects of the selected alternative is presented after each significant issue.

1. Water Quality/Fish Habitat: The selected alternative will create the possibility of increased stream channel sedimentation and/or turbidity. The amount of sediment potentially entering fish-bearing streams with listed fish species, however, is low compared to the sediment carried

by the Middle Fork River during peak stream flow events. The likelihood of sediment reaching these streams is greatly reduced by vegetative buffers along all stream channels. Therefore the risk of harming fish and the degree to which fish habitat could be degraded is low. I have reached this conclusion from the analysis of cumulative water quality effects (EA pages 57-80) which shows that in the worst case scenario sediment and turbidity generated by actions in the selected alternative would be no more than about one percent of the sediment generated by natural events and past management actions upstream of the project area. Mitigations that are part of the selected alternative (such as riparian buffers, helicopter yarding, and placement of sediment trapping structures in road ditches) will be implemented to further reduce such risk.

2. Late-Successional Wildlife Habitat; This decision will modify and/or remove habitat or diminish its quality for use by northern spotted owls and other species favored by closed canopy, older forest conditions. The change in late-successional habitat amounts and quality are a conscious tradeoff to meet the purpose and need for action, and to provide habitat for a different group of species. In the context of the landscape, northern spotted owl habitat amounts, connectivity, and functions will be maintained (EA, pages 150-160). The US Fish and Wildlife service Biological opinion for this project has found that its implementation will not jeopardize the continued existence of spotted owls.
3. Maintenance of Biodiversity; The analysis in the EA shows me that Alternative E enhances biodiversity through more acres of savanna restoration. Because that habitat has been declining over the last one hundred years, and continues to be lost, it is important to restore a large enough block to act as a refugia. The analysis shows there is a high likelihood of restoration success (EA, pages 106-109). The amount of habitat restoration that will occur under Alternative E will better approximate historic landscape patterns and conditions. Even though Alternative E restores a substantial amount of acreage, less than two percent of the originally more open forest would be restored (EA page 102) through this action.
4. Fuel Accumulation and Fire Risk. All fully developed action alternatives produce similar desirable conditions, though on a greater or lesser amount of land (EA, pages 166-171). Alternative E moves more acreage to the desired fuels profile and Fire Regime Condition Class in the most efficient manner, and provides for maintenance of a reduced Condition Class through future prescribed burning.

Several other issues were identified but were found not to be significant for the purposes of this project. Generally, non-significant issues are mitigated by standards and guidelines provided for in the Forest Plans or the mitigating measures mentioned above, are addressed through resource prescriptions, or are provided for by compliance with laws and regulations. These issues included cultural resource protection, maintenance of soil productivity, air quality, economics, noxious weeds, recreation, and scenic conditions. The potential impacts of the alternatives on these issues and the environmental factors were analyzed in Chapter 3 of the EA.

## **Alternatives Considered**

Four action alternatives were developed for this proposal in addition to the No Action Alternative. The action alternatives were developed around the significant issues of water quality/fish habitat, late-successional wildlife habitat, maintenance of biodiversity, and fuel accumulation and fire risk. All the action alternatives developed for this project would require a non-significant Forest Plan amendment, as discussed below. The alternatives fully developed and evaluated in the EA are:



**Alternative A**, identified in the EA as the Proposed Action, would restore about 241 acres with a single excess tree removal harvest entry, retaining an average of 20 trees per acre, including all legacy trees and the largest of the 100 year old age class;

**Alternative B** is the “No Action” alternative where the proposed actions do not take place. The No Action alternative does not respond to the purpose and need for action, but provides a benchmark or a point of reference for describing the environmental effects of the proposed action and other alternatives;

**Alternative C**, staged entry, begins restoration on about 171 acres with an excess tree removal harvest entry that would retain twice as many trees as the Proposed Action (40 trees per acre) in response to concerns that more rapid restoration may be detrimental;

**Alternative D**, multiple methods, begins restoration on the same 171 acres treated under Alternative C, but through three different silvicultural prescriptions designed to test varying methods of restoration (one similar to that addressed in Alternative A, one similar to that addressed in Alternative C, and one treatment that would release individual legacy trees), in response to uncertainty as to what restoration techniques would be most successful;

**Alternative E**, full restoration, is similar to Alternative A but would restore all the available acres (e.g., avoids restoration within permanent stream riparian areas), totaling 455, within the project area with a single entry harvest removal of excess trees.

The Jim’s Creek Savanna Restoration Project interdisciplinary (ID) team also considered several management alternatives that ultimately were not analyzed in detail. These alternatives were determined not to warrant full development and analysis due to either physical or economic feasibility problems, lack of effective response to the purpose and need for action, or because they would involve excessive resource risk and/or were likely be unacceptable to the general public, as follows:

1. Restoration by Underburning: This alternative avoids the need to fell and/or remove trees by relying upon prescribed fire to thin out the 100 year age class of Douglas-fir that has encroached upon the savanna. The team determined that underburning would not likely selectively kill excess trees without threatening legacy trees as well.
2. Regeneration Harvest Under Forest Plan Standards: This alternative was initially conceived to illustrate how the proposed action contrasts with standard forest management in Matrix lands as directed by the Forest Plan as amended by the Northwest Forest Plan. This alternative would entail dispersed regeneration harvest units with green tree retention on blocks less than 60 acres in size in Matrix, and less than 8 to 15 acres in the scenic allocations, with required, relatively dense, reforestation. Many such examples of such past management strategies already exist within and adjacent to the project area, and such an alternative does not respond well to the purpose and need for action.
3. Restoration by Tree Removal but No Sale of Removed Trees: This alternative would, after full implementation, essentially resemble the Proposed Action in appearance and environmental effects, but costs would be very high and that level of funding is not available for the project.
4. Restoration by Tree Killing but no Removal of Killed Trees: This alternative would “remove” excess trees in the 100 year age class by killing them, either by girdling or felling, but would create excessive fuel accumulations, since killed trees would remain on-site.
5. Smaller Initial Acreage of Treatment: This approach would apply treatments similar to those described in the fully developed Alternatives A, C, or D on much smaller areas, in the neighborhood of 10 to 30 acres. This alternative would not recreate historic vegetation patterns.

6. Release of individual oak and/or pine only across the entire area: This alternative would prolong the life of these legacy trees but would not completely restore historic conditions.
7. Road Construction: All the above alternative strategies, including those fully developed and analyzed, could be accomplished in the most economically efficient fashion if this area were fully roaded. Additional road construction was not fully considered due to the presence of listed fish in the project area vicinity and to findings in the Watershed Analysis that road density is already above desired levels.

Complete rationale as to why these alternatives were not fully analyzed is contained in the EA on pages 45-51.

## **Public Involvement and Scoping**

Scoping of this project began in the summer of 2001 when stand exams were conducted to document the changes this forest has experienced in the last 100 years. The public involvement process informally started with a series of field visits to the site beginning in May of 2002. Parties interested in Oregon white oak restoration were initially invited on these field trips (such as those affiliated with the Oregon Oak Communities Working Group, the Middle Fork Watershed Council, and tribal governments). The purpose of these trips was to solicit comments on the purpose and need for action and the importance of restoring this habitat.

A public meeting with 15 non-Forest Service attendees was conducted on February 1, 2003 for all those who had participated in the field trips to that date. The purpose of that meeting was to solicit specific ideas as to what this landscape should look like in 100 years, and to discuss what might need to happen to meet that desired condition.

Formal scoping of this project began in November, 2003 when the Jim's Creek Savanna Restoration Project proposal was first included in the Willamette National Forest's Schedule of Proposed Actions (SOPA; Forest Focus), mailed quarterly to a list of people interested in the Forest's management activities. The SOPA provides one means of keeping the public informed of the progress of individual projects. The SOPA is also made available to the public on the Willamette Forest website. The Jim's Creek project has been included in each subsequent issue of the SOPA.

Another public field trip with 15 attendees, including representatives of environmental, timber industry, tribal, and legislative groups, was conducted by the Cascadia Wildlands Project and the Middle Fork Watershed Council on May 12, 2004. This field trip's goals were to facilitate a dialogue about restoration opportunities and discuss the specific proposed actions. The Jim's Creek Savanna Restoration Project field trip was also covered in a two part article in the Dead Mountain Echo, the City of Oakridge's weekly newspaper.

Specific management actions for the Jim's Creek Savanna Restoration project were first proposed in the formal Scoping document prepared on April 2, 2004. This document was mailed to a list of 23 individuals, organizations, agencies, and Tribes identified as being interested or affected by the proposal who have expressed interest in similar Middle Fork Ranger District projects, in addition to the electronic project mailing list mentioned below.

Altogether, a total of ten formal field trips to the project area have been conducted and five presentations of the project have been made to various interested organizations including the Middle Fork Watershed Council, the Oregon Oak Communities Working Group, and the Oregon Hunter's Association. The Middle Fork Ranger District also sponsored a five day community collaboration workshop in November of 2004 which used the Jim's Creek Savanna Restoration Project as a case study and opportunity to generate local collaborative interest and efforts. Workshop participants went into the

communities of Oakridge/Westfir, Lowell, Dexter, and to a lesser extent Eugene/Springfield to census the community's interest in the Jim's Creek project.

Over the life of this project, an electronic public mailing list containing over 70 names was compiled from field trip attendees and others expressing an interest in the project. This mailing list was sent periodic updates on the project, including copies of all Interdisciplinary Team meeting notes. A listing of the individuals and organizations who have participated in the development of this project are contained in the Analysis File for the EA. Copies of received emails and letters and written documentation of phone calls and in-person conversations are in the public involvement section of the Analysis File, as is a summary of the public collaborative efforts that have occurred in the course of this project's development. The interdisciplinary team and I have reviewed all these comments and have incorporated concerns and suggestions into the issues and alternatives where applicable and appropriate.

Public reaction to this restoration proposal has been very favorable. Everyone who has participated in public field trips or meetings has expressed general support of the need for restoration and the proposed actions. Some have expressed some reservations in terms of how much land to initially treat and how aggressive that treatment should initially be, as fully discussed under the vegetation portion of section III, Environmental Consequences of the EA, (specifically the restoration efficacy discussion, pages 103-104) and below in the discussion of public comments received during the 30 day EA public review period.

The following State and Federal agencies were contacted or consulted during the course of this project: the Oregon Department of Fish and Wildlife (ODFW), the Oregon State Historic Preservation Office, the US Fish and Wildlife Service (USFWS), and the National Oceanic and Atmospheric Administration (NOAA) - Fisheries Division. The USFWS provided a Biological Opinion supporting a finding of no jeopardy and no adverse modification of critical habitat for the northern spotted owl, and a Biological Opinion determining the Jim's Creek project is not likely to jeopardize the continued existence of bull trout. NOAA – Fisheries provided a Biological Opinion determining the project is not likely to jeopardize the continued existence of spring Chinook salmon. The Klamath Tribe, the Cow Camp Band of the Umpqua Tribe, and the Confederated Tribes of the Grand Ronde, Siletz, and Warm Springs were also contacted during the planning process. No specific, formal comments were received from the Tribes or ODFW.

A legal notice was published in the Eugene Register-Guard daily newspaper requesting comments on the proposed actions and EA on June 19, 2006. A letter announcing the availability of the EA was also sent to people who have participated in the environmental analysis process, including the 70 person mailing list mentioned above and the 22 person list used to mail the original scoping document. The 30 day EA comment period ran from June 19 through July 19. In addition, the EA was and is available for viewing on the Willamette National Forest website.

## **Responses to Public Comments**

I have made this decision with consideration of comments received during the EA's 30-day public review period, as per 36 CF Part 215.6(b). Six letters of comment were received during this period; no verbal comments were received. Five of those comments were in support of the proposal. Expressions of support were received from two organizations, the Rocky Mountain Elk Foundation and the National Wild Turkey Federation. Three individuals (two from the City of Oakridge, one from the City of Dexter) also provided supportive comments. All the supportive comments specifically advocated the tentatively preferred Alternative E. One set of comments was received from the Oregon Natural Resources Council (ONRC). It contains nine concerns. These concerns are paraphrased below with a brief summary of my responses to them.

No comments were received relating to the proposal to make a non-significant Forest Plan amendment exempting this project from specific Forest Plan standards and guidelines relating to scenic areas and trail corridor management.

A full description of the comments received and my responses to them can be found in the Jim's Creek Savanna Restoration Project Response to Public Comments document contained in the project's Analysis File:

***1) We support the objectives of the Jim's Creek Savanna Restoration but remain concerned about the impacts of commercial logging as the remedy for the problem. ONRC would prefer a phased and adaptive approach [as addressed in Alternatives C and D]; the Forest Service has little experience with this type of restoration.***

The analysis documented in the EA did briefly consider restoration alternatives to commercial logging (EA pages 45 to 48), including that of No Action (EA, pages 31 and 32). Alternatives that would not commercially remove excess trees to accomplish restoration of historic savanna conditions were found to be logistically impractical, very costly, and/or to have environmentally negative effects.

This comment did not provide specific reasons why they are unsure that the restoration strategy of Alternative E would be successful. The EA on pages 103 to 109 explains the rationale and reasoning of why Alternative E has a high likelihood of successfully restoring the savanna conditions.

***2) The Forest Service should attempt to objectively balance the benefits of natural savanna restoration and the adverse impacts of treatment, primarily loss of late-seral habitat and sediment production. The Forest Service must avoid arbitrary decision making by identifying thresholds of concern that would help improve the balancing of competing interests.***

As mentioned above, the decision to implement Alternative E does balance the trade-off between losing late-seral habitat in order to restore a much more rare habitat, that of an open forest/savanna (EA, pages 146-149, and 100-107). Several thresholds of concern were considered in the Jim's Creek analysis including potential impacts to species dependant upon late-successional forest habitat, impacts to threatened endangered and sensitive species, and water quality effects. The choice to restore this savannah is a conscious acceptance of the trade-offs including the loss of benefits from other habitat types this site might support.

The impacts of savanna restoration on spotted owls and their habitat was of particular concern and one of the measurements or "thresholds" specifically evaluated, along with several other late-successional and old-growth dependant species, as an indicator of the trade-off between savanna restoration and late-successional habitat impacts. Such trade-offs were also investigated in relation to the potential effects of the proposed harvest and subsequent slash burning on sedimentation and water quality, in particular in terms of how threatened fish species may be affected by savanna restoration.

The Jim's Creek Savanna Restoration project analysis did look at these multiple scales to provide as complete and accurate review of the resource trade-offs as possible (EA, pages 102, 103, 109 to 114, 121, and 165). Implementation of Alternative E could generate certain effects such as a slight decrease in water quality, and will result in a decrease in late-successional forest habitat, but those effects are exceedingly small at the watershed scale.

**3) Based upon current stand composition ( in terms of trees per acre by species), we suggest that the Forest Service focus on removing trees 24 inches in diameter and smaller. Trees larger than 24 inches in diameter that need to be removed can be killed and retained as snags and coarse woody debris.**

As stated on pages 27, 32, 35, and 39 of the EA, the largest trees in the stand will be retained. The Silvicultural Prescription (page 36) determined that retention of the 20 largest trees (except for ponderosa pine and Oregon white oak, where all trees of those species will be retained regardless of size) equates to removal of all Douglas-fir and incense cedar trees less than 24 inches in diameter. All trees greater than or equal to 24 inches in diameter will be retained except where they directly and significantly compete with a savannah legacy pine or oak.

**4) Douglas-fir was the dominant tree on these sites 100 years ago, so not all of them should be removed. Large Douglas-fir should be retained.**

I agree, as stated in the EA (page 96), Douglas-fir was marginally dominant in the savanna 100 plus years ago. Large Douglas-fir will be retained as described above.

**5) Provision must be made for long-term treatments. The Forest Service must maintain a regular schedule or adaptive plan for re-treatment of this area. The first treatment would be supported by commercial extraction, what about the next treatment and the ones after that?**

As stated on pages 17 and 30 of the EA and on pages 47 to 49 of the Silvicultural Prescription, provision for maintenance underburning is as important in the long-term restoration of this landscape as is the removal of excess trees. Also as stated on page 47 of the Silvicultural Prescription, the use of broadcast burning is a relatively efficient means to maintain this open forest. This efficiency will provide a greater likelihood that adequate funding to accomplish maintenance underburning will be available in the future. This decision only applies to near-term actions. Future restoration and maintenance activities will be evaluated in future decisions based upon monitoring results.

**6) I could not find whether the EA discloses the presence of phytoliths in the soils associated with areas proposed for treatments. Areas lacking phytoliths would indicate a stand history lacking abundant grasses, so such areas might be good paces for green tree retention clumps.**

The EA does not disclose the distribution of phytoliths in the project area soils (phytoliths are microscopic silicate structures that occur in many types of plant cells – particularly in grasses - which are very resistant to decay, so they persist in soils for many years). The phytolith information mentioned on page 97 of the EA came from a Masters Thesis prepared by a student from the University of Amsterdam using data collected in the Jim's Creek project area entitled "Reconstruction of Pre-Settlement Vegetation Patterns Based Upon Phytolith Analysis" and completed in March of 2006. This thesis was cited because it generally supports the notion, originally derived from historic stand structure, the wide-spread occurrence of remnant and depauperate bunchgrass plants, and fire scar frequency, that the historic open forest floor was dominated by a grass cover (EA pages 96 to 100). All of the plots used in that study contained some grass phytoliths and most (about 90 percent) contained significant amounts.

As can be seen in this study, (contained in the project's Analysis File), the documentation and identification of phytoliths in the soil is not an easy task; concentration and isolation of soil phytoliths required multiple rounds of toxic chemical baths and physical processing. A full cycle of

extraction from the soil samples took 50 hours and examination of prepared microscopic slides was typified as being “highly time consuming”. It would be especially burdensome to verify that each and every acre of treatment proposed contains grass phytoliths. Such a comprehensive effort is not necessary since the stand age, structure, and presence of remnant bunchgrass plants adequately indicate the past open nature of the forest.

In addition, green tree retention clumps are to be located in areas containing the largest and oldest trees (Northwest Forest Plan, page C-42), which may or may not occur on a given site that happens to contain low levels of phytoliths.

***7) We question the conclusion that existing levels of snags and coarse wood exceed the historic range of variation in this area. The Forest Service should consider extending the methods used by Nonaka et. al. in the Oregon Coast Range to the Oregon Cascades.***

The rationale for the finding that the project area now contains more snags and down wood than it did historically can be found on pages 98, 99, and 138 to 146 of the EA. This logic in large part responds to the fact that the area once had a very frequent fire regime. The analysis of dead wood amounts was limited to the Mixed Conifer forest type. This forest type is unusual on the Willamette National Forest and also had a frequent fire regime that would prevent large amounts of dead wood from accumulating. Application of dead wood amounts generated by a simulation model developed for the Oregon Coast range, a forest type that is very different than the Middle Fork Mixed Conifer forest type, would be inappropriately applied ecologically to this unique Oregon Cascade forest type. Nothing in the Nonaka study implies that it could be applied to western Oregon Cascade coniferous forests.

***8) Soil disturbance and canopy reduction create ideal conditions for the spread of weeds. Please make sure that weeds are not spread through this project.***

Noxious weed spread was identified as an issue (EA page 25) and potential effects and risks were disclosed (pages 114 to 116). A number of aspects of the preferred alternative have been designed and specified to minimize the spread of noxious weeds (EA pages 17, 30, and 52).

***9) Please make sure that treatment of activities generated fuels does not excessively harm soils or tree roots***

Various mitigating measures have been identified (EA pages 51 and 52) to minimize the impact of slash disposal burning on the soils and remaining trees. These include removal of slash and duff collars from around all legacy trees, hand piling and burning slash (as opposed to broadcast burning) to avoid affecting all the soil surface within the treatment areas, and burning piles in the winter to reduce the heat pulse to the soil and to avoid injury to roots when they are actively growing (Silviculture Prescription, pages 42 and 43).

## **Finding of No Significant Impact**

From my review of the results of the environmental assessment, I have determined that 455 acres of savanna restoration, as proposed, is not a major federal action that will significantly affect the human environment. An environmental impact statement is not needed, and will not be prepared. This determination was made considering the following rationale, starting with the context and intensity factors listed in the Code of Federal Regulations' definition of "significantly" (40 CFR 1508.27).

**Context:**

*"The significance of an action must be analyzed in several contexts such as society as a whole, the affected region, the affected interests, and the locality.....in the case of site-specific actions (such as this one), significance would usually depend on the effects at the locale rather than the world as a whole.*

The Jim's Creek Savanna Restoration Project responds to recommendations made in the Middle Fork Willamette River Downstream Tributaries Watershed Analysis, the Integrated Natural Fuels Management Strategy, and the Middle Fork Willamette Viewshed Corridor Study (EA, pages 14 and 202). It implements direction to maintain biodiversity set forth in the Willamette National Forest Plan (FW-201). The Willamette National Forest is one of nineteen National Forests in the Pacific Northwest Region. The selected alternative of the Jim's Creek Savanna Restoration Project will affect less than 0.03 % (455 out of 1,700,000 acres) of the Willamette National Forest. This proposal to remove excess trees through a commercial timber sale would generate about 20 percent (12 out of 60 MMBF) of the probable sale quantity of timber to be sold in a given fiscal year from the Willamette National Forest. The selected alternative will affect about 0.4 percent (455 out of 110,000 acres) of the Hills' Creek Reservoir watershed and accomplishes restoration of about 1.8 percent of the historically more open mixed conifer forest type.

This decision also occurs in a social context. From a social perspective, restoration of healthy ecosystems is an important public value and the public desires that this restoration be accomplished. This action, though small in the context of the entire Middle Fork watershed, responds to those values.

Timber harvest has been occurring in the Middle Fork watershed for about the past 50 years. Over that period of time an average of about 10,000 acres of regeneration harvest per decade has occurred. In the context of past management actions, the amount of tree removal that will occur with the implementation of Alternative E is not a significant amount and will have a negligible effect upon the watershed's functions and values, the Forest's timber inventories, and the county's economy. It will also have negligible effects upon regional threatened species populations (see the discussion below on threatened and endangered species under Intensity factor #9)

Therefore, the effects of the selected alternative on the resources and species within the project area or at scales larger than the project area are not significant as disclosed in Chapter 3 of the EA.

**Intensity:**

*1) Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on the balance the effects will be beneficial.*

The effects of the proposed actions will be both beneficial and adverse, as documented in Chapter 3 of the EA (pages 57-205), but not significantly so. The actions have beneficial effects in that they will restore an important and increasingly rare vegetation type that will benefit a number of animal species (EA pages 119-125) and in so doing, best achieve the purpose and need for action. These are locally important beneficial effects that do not appreciably affect the larger landscape. Beneficial impacts in addition to overall savanna restoration are the reduction in road density (EA page 52) and maintenance of the road system to assure it will not become a future source of sedimentation. The analysis shows there will be some socio-economic benefit from the revenues produced from the sale of timber to the local communities, and the proposal provides the opportunity to fund other resource restoration activities (EA pages 173-180).

On the other hand, there will be some detrimental effects. Habitat for species listed as threatened or endangered will be diminished, as discussed below. The actions may have some limited, short-term

adverse impacts to water quality and fish habitat from sedimentation as a result of the proposed slash burning operations (EA pages 70-80). The proposed actions will eliminate suitable northern spotted owl habitat across most of the project area. The proposed road maintenance could increase (though by a small amount) the likelihood of sediment entry into the stream channel system while minimizing the potential for future road related sediment production from erosion of improperly maintained surfaces and structures.

I find that neither the beneficial nor detrimental effects documented in the EA will significantly affect the quality of the human environment. The context of the negative effects to listed species (generated by potential short-term decreases in turbidity in the Middle Fork River and the removal of some 321 acres of spotted owl habitat) is negligible in the context of the entire watershed and the effects of past actions (EA pages 82 and 156-160). Since the importance of restoration of this rarer habitat (EA pages 13 and 102) is contextually greater than the small effects upon listed species, I find that the locally important beneficial effects of this action are greater than the comparatively insignificant adverse effects that will occur.

2) *The degree to which the proposed action affects public health or safety.*

The project designs and mitigations will result in no adverse public health or safety. It will not disproportionately impact minorities and low income populations as defined in Executive Order #12898 (EA pages 198-200).

3) *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

There are considerable historic and cultural resources in the project area in the form of archaeological sites and culturally modified trees. There are no park lands, prime farmlands, nor wild and scenic rivers within, adjacent to, or affected by the project.

A cultural resource survey has been completed that encompasses all areas that could be disturbed by the proposed activities. The survey was conducted according to an inventory plan approved by the Oregon State Historic Preservation Office (SHPO). This inventory is consistent with an agreement between the USDA Forest Service R6/PNW, Oregon SHPO, and the advisory council on historic preservation. Many areas containing these resources have been identified within the project area. The actions avoid disturbance of, or excludes these areas from, any management activities and/or mitigates the effects by protecting the sites through minimization of disturbance by yarding method and log suspension requirements. The proposal will have no adverse effects to cultural resources (EA pages 173 and 174) other than as mentioned below. A provision will be included in the Integrated Resource Timber Contract to provide for protection of this resource in the event that new material is discovered during ground disturbing activities.

The one adverse effect that this project will have on cultural resources is the felling and eventual consumption by prescribed fire of culturally modified trees that have died over the past several decades. Most of these trees will have to be felled for worker safety reasons as fully explained on page 174 of the EA. This effect has been mitigated through data collection; the locations and conditions of these dead trees have been recorded through GPS technology, photography, and verbal description. Though these cultural legacies will be physically lost through this action, it should be noted that these modified trees have a relatively short life expectancy even with no action. They are all ponderosa pine which deteriorates fairly rapidly. Many are nearly unrecognizable as cultural artifacts due to this deterioration. All are vulnerable to complete consumption by wild fire in their



current state. The 1996 wildfire in the northern corner of the project area contained several dead, culturally modified trees that were essentially destroyed by that natural event.

While the project area in and of itself is not ecologically critical, the vegetation is not typical of the Middle Fork Ranger District. The current rarity of open Oregon white oak and pine forests in western Oregon (EA page 14) indicates this type may be of critical ecological importance.

Restoration of a portion this vanishing vegetation type is a driving factor behind my decision, and addresses the fact that an important habitat type is being lost over a broad scale.

*4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

The Jim's Creek Savanna Restoration Project analysis is based upon the best available scientific information and site-specific data. Models and methods used to estimate the effects presented in Chapter 3 of the EA are widely used in similar analyses and have been reviewed by the research and academic communities. I am not aware of any credible, peer reviewed scientific questioning of the methods used in this analysis, nor of its results.

This project has received considerable support from a wide spectrum of the public. No comments have been received during the scoping and analysis of this project, nor during the 30 day public review period for the EA, that have identified any elements of controversy regarding the results of the analysis or the methods, techniques, or rationales used.

I find that there is no known controversy surrounding the scientific basis for the estimation of effects of the proposed tree removal, fuels treatment, oak and grass planting, road maintenance and future maintenance burning presented in the Jim's Creek Savanna Restoration Project EA.

*5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*

Experience in implementing Oregon white oak and ponderosa pine habitat restoration is limited, but we have considerable experience in the practice of silviculture for the purpose of influencing and enhancing tree growth, as well as considerable amounts of experience in using fire to provide for ecosystem benefits. The Middle Fork District staff has considerable local experience in activities similar to proposed actions in terms of implementation and analysis of effects upon the landscape.

Some feelings of uncertainty were expressed by the public early in the development of this project. Those concerns were related to the likelihood of restoration success and have been addressed under the Biodiversity issue evaluation criteria of restoration efficacy (EA pages 103-109). The main uncertainty in regard to potential project effects is whether or not there will be any short-term increases in stream turbidity, since that potential effect will occur only if there is a large storm event at a specific time in the redevelopment of ground vegetation (EA pages 73-80). Also uncertain is whether any mobilized soil will be captured by surface roughness and riparian buffers, or if it will travel far enough to enter a stream channel.

The general effects of timber harvest and road maintenance are not uncertain, nor do they involve any unique or unknown risks. This lack of uncertainty is due in most part to the long history of management in this area which allows us to predict with reasonable certainty, based upon the results of the last 50 years of forest management, the impacts of the proposed actions. Additionally, there are examples of past management activities within and adjacent to the project area that serve as examples of the result of the types of activities I am authorizing with this decision (EA page 105).

There are always some inherent uncertainty and limits to the predictability of ecosystem functions and response to disturbances. To the extent that we do not know what may happen in this area during a 250 year return interval flood, a landscape scale wildfire, or a subduction earthquake, the potential environmental effects are uncertain or unknown, but this type of uncertainty is not unique in the daily lives of humans, not are these uncertain events part of the proposed actions. I do not consider any of the potential effects discussed above to be highly uncertain given our extensive experience in vegetation manipulation in these types of environments.

*6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

Given the recent realization of the substantial changes that have occurred within the mixed conifer forest type (EA, page 91), and the value such open forest habitats have, this action may very well establish a precedent for future actions. As mentioned on pages 103 and 109 of the EA, the Jim's Creek Savanna Restoration Project can be seen as a test case. If the results of these actions are seen by the public to be favorable in terms of restoring valuable and rare wildlife and plant habitat and providing unique recreational experiences, the project could very well result in additional restoration proposals in this unique forest type. Whether those potential future actions would result in significant effects would be determined by the environmental analysis that would be conducted at the time they are proposed.

In a more general sense, given the long history of timber management in this general area and the current Forest Plan land allocations, the selected actions will not establish a precedent for future actions. The project area is almost entirely composed of Matrix lands as defined by the Northwest Forest Plan, those lands where timber harvest may take place.

The Forest Plan is the vehicle that makes decisions in principle about future considerations. Future projects to implement Forest Plan direction will be analyzed in separate NEPA planning processes. Decisions based upon the Jim's Creek Savanna Restoration Project analysis will not directly affect how such future decisions may be made.

*7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

The analyses presented in Chapter 3 of the EA include numerous evaluations of cumulative impacts. These discussions include effects of past, present, future foreseeable actions in addition to those of the selected alternative, as follows: water quality and fish habitat (EA, page 82), late-successional habitat (EA, pages 159-160), biodiversity (EA pages 102, 103, 109, and 113), fuels and fire risk (EA, pages 170-171), noxious weeds (EA, page 119), recreation and scenic effects (EA pages 183, 185, 186, 191, and 192), snags and coarse woody debris (EA, pages 145 and 146), land birds including neotropical migratory birds (EA, page 161), big game habitat (EA, pages 135 and 136), stream temperature (EA, pages 71-82), peak stream flows (EA, page 82), sedimentation and water turbidity (EA, pages 82 and 83), soil erosion and detrimental soil conditions (EA, page 90), economics (EA, page 180), and air quality (EA, pages 117). Past management actions which the above analyses have taken into account consist primarily of timber harvest and associated road construction which have occurred in this watershed over the last 50 years.

All these effects are within the levels anticipated by the Willamette National Forest and the Northwest Forest Plans. The Middle Fork Down Stream Tributaries Watershed Analysis is incorporated through numerous references throughout the EA. This Watershed Analysis presents a comprehensive analysis of the watershed conditions that provides a contextual basis for the

discussion of cumulative effects. No significant direct, indirect, or cumulative impacts to public safety, recreation, fuel loadings, fisheries, wildlife, water, soil, or other components of the human environment are anticipated. Specifically, in terms of water quality, the actions could increase the amount of turbidity in the Middle Fork of the Willamette River during storm events by at the most about one percent over that produced by past management actions and the results of natural events (EA, page 82).

*8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places or may cause loss or destruction of significant cultural or historical resources.*

An appropriate review of this proposal has been conducted, and no significant property (s), which may be eligible for inclusion in the National Register Historic Places were found to be present in the project area.

This document meets the requirements of Section 106 and 110 of the National Historic Preservation Act (EA page 195).

Cultural resources have been surveyed (as mentioned above under Item 3). The proposal will have no adverse effects to cultural resources (EA, pages 173 and 174), aside from those mentioned above relating to dead culturally modified trees.

*9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.*

The Jim's Creek Savanna Restoration Project Biological Evaluations (BE) and Biological Assessments (BA) address the effects upon endangered and threatened species and their habitat. A summary of the effects to threatened northern spotted owls is found in the EA (pages 150-160). The project area is not located within areas designated by the USF&WS as critical habitat for the threatened northern spotted owl. The effects determination is a "likely to adversely affect" northern spotted owls (EA, page 158) because the project will alter about 321 acres of currently suitable spotted owl habitat. This represents a very small percentage (much less than one percent) of the habitat contained in the sixth-field watersheds within which the Project area occurs (EA, page 159). The excess tree removal could create a noise disturbance to owls during the nesting season but this is mitigated with a seasonal restriction. Formal consultation with USF&WS as required by Section 7 of the Endangered Species Act was completed and a Biological Opinion for a finding of no jeopardy to the northern spotted owl is located in the Analysis File for this project.

The project area contains peregrine falcon habitat but there would be no adverse effects to this species (EA, page 149).

The Middle Fork of the Willamette River contains and provides habitat for spring chinook salmon and bull trout, both federally listed (threatened) fish species. The Middle Fork is currently designated as an Evolutionary Significant Unit for spring chinook salmon and the bull trout in the Middle Fork watershed are considered a Columbia River Distinct Population Segment. The finding of the Biological Assessment (BA) for the selected alternative is a "likely to adversely affect" spring chinook salmon and bull trout (EA page 83). This determination was made due to the possibility of sediment generation that could affect these species, but the probability and magnitude of that potential is low and would only result in short-term displacement of fish (EA, page 79). Formal consultation was completed with the National Oceanic and Atmospheric Administration (NOAA) - Fisheries Division and the US Fish and Wildlife Service. Biological Opinions from these agencies

containing a finding of no jeopardy for Chinook salmon and bull trout as a result of the proposed actions. The Biological Opinion findings are contained in the project's Analysis File.

I find, based upon the analysis presented in Chapter 3 of the EA and the various specialist reports and Biological Evaluations and Assessments, that these effects are relatively small in the context of the landscapes that were analyzed and that the risk to populations and individuals is small. These effects do not constitute significant effects to the human environment based upon their context and magnitude.

The fish effects determination is based upon a worst case scenario and any potential likelihood and duration of water turbidity increase, regardless of the magnitude or probability. As stated in the Watershed/Fisheries Report and pages 73 to 79 of the EA, Alternative E is not likely to measurably reduce the quality of fish habitat in the main stem of the Middle Fork River, and much of the modeled soil movement is likely to be re-deposited on site rather than enter stream channels. The potential for adverse water quality effects that could affect fish would occur only if a large storm event occurs before ground vegetation redevelops. In such an event the effect is likely to be restricted to the side channel of the Middle Fork that Jim's Creek flows into, resulting in a temporary displacement of fish (EA pages 73 and 74). Given the context in which these effects are occurring, which includes the magnitude of past actions upstream of the Jim's Creek project area, and the fact that various mitigations will be employed (such as retention of stream buffers and placement of sediment trapping structures along Road 21 to filter any soil erosion that does substantially move before it reaches the stream channels), I find these potential effects to be insignificant.

The situation resulting in the likely to adversely affect determination for northern spotted owls is similar to that for fish; the call is made because there will be removal of suitable owl nesting, foraging, or roosting habitat, not due to a known, detrimental impact upon individual owls. The owl effects are much more certain than those for water quality, at least in the sense that a discreet number of acres definitely will be so affected. While the selected alternative would remove suitable spotted owl habitat (that capable of providing nesting, roosting and foraging opportunities), these acres are not considered to be critical habitat, and this area was likely too open to function as suitable habitat historically (EA, pages 151 and 154). While the selected alternative would remove suitable owl habitat within the home range of one activity center to somewhat below 40 percent, from the landscape perspective the project's effects on owl habitat are so small as to be immeasurable within the five sixth field watersheds that contain or are closely adjacent to the project area (EA pages 152 to 160). Since the effects within the watershed are so small, and the project area has been designated as Matrix by the Northwest Forest Plan and is not identified as critical habitat for the northern spotted owl, I find these effects to also be insignificant in the context of the landscape.

*10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

This project is in compliance with all Federal and State laws and various recent Executive Orders relating to environmental protection. A summary of how this project and the design of alternatives comply with the federal and state laws and polices can be found in Chapter 3 of the EA (pages 195-201). The proposed action meets State air and water quality standards and complies with all regulations in the National Historic Preservation Act, National Environmental Policy Act, Endangered Species Act, National Forest Management Act, Clean Air Act, and Clean Water Act.

This finding is based the Jim's Creek Savanna Restoration Project environmental assessment being prepared in accordance to Forest Plan Management Areas and Standards and Guidelines; State air quality standards; water quality and beneficial uses; threatened, endangered, and sensitive species;

and National Forest Management Act requirements for suitability for timber growth (see the Silvicultural Prescription contained in the project's Analysis File).

### **Forest Plan Amendment Significance Determination**

I have determined this Forest Plan amendment is non-significant based upon the following factors specified in FSH 1909.12.

Timing – The Willamette National Forest Plan was approved in 1990 so it is now over 15 years old. It is currently scheduled for revision in 2011. Given the upcoming revision and the length of time the Plan has been in effect, the import of these changes is small.

Location and size – This exemption from five specific standards and guidelines is to be applied only to the 688 acre Jim's Creek project area. This piece of land equates to approximately 0.03 percent of the Willamette National Forest.

Goals, objectives, and outputs – This amendment would not have any effect upon the production of goods and services projected by the Forest Plan. In the short-term these exemptions would provide for additional harvest in the Jim's Creek project area compared to what could be done under the harvest amounts and unit size restrictions contained in these trail and scenic management guidelines, but given the small percentage of the Willamette National Forest that this project represents, there would be virtually no effect at the Forest level.

Management prescription – The thoughts and rationale behind this different approach to forest management and the need to promote and restore biodiversity may well influence future decisions and standards and guidelines applicable to specific areas of the Forest in the next revision of the Willamette National Forest Plan. However, this Forest Plan amendment applies only to this project and project area at this time.

### **Administrative Review and Appeal Rights**

This decision is subject to appeal pursuant to 36 CFR 215. Only individuals or organizations that submitted comments or otherwise expressed interest during the EA comment period, which ran from June 19 to July 19, may appeal. Notice of Appeal must meet the requirements of 36 CFR 215.14. Appeals can be submitted in several forms, but must be received by the Appeal Deciding Officer, Regional Forester, within 45 days from the date of publication of this notice in the *Register-Guard*, Eugene OR. Appeals may be:

- 1) Mailed to: Appeal Deciding Officer, Regional Forester; ATTN: APPEALS, P.O. Box 3623; Portland, OR 97208-3623;
- 2) E-mailed to: [appeals-pacificnorthwest-regional-office@fs.fed.us](mailto:appeals-pacificnorthwest-regional-office@fs.fed.us). Please put APPEAL and **name of project** in the subject line. Electronic appeals must be submitted as part of an actual e-mail message, or as an attachment in Microsoft Word (.doc), rich text format (.rtf), or portable document format (.pdf) only. E-mails submitted to addresses other than the ones listed above, or in formats other than those listed, or containing viruses, will be rejected. It is the responsibility of the appellant to confirm receipt of appeals submitted by electronic mail;
- 3) Delivered to: Pacific Northwest Regional Office, 333 SW First Avenue, Robert Duncan Plaza Building, Portland Oregon between 8 am and 4:30 pm, M-F; or
- 4) Faxed to: Regional Forester, ATTN: APPEALS at (503) 808-2255.

## Implementation

This decision to remove trees with a commercial timber sale, maintain and reconstruct existing roads, abate the slash this harvest will produce through hand piling and burning, plant the harvested areas with various native species typical of an open forest, and various other restoration activities such as prescribed burning of plantations and snag creation is scheduled to begin in the late summer or fall of 2007.

Volumes, acreages, and mileages discussed in project documents are approximations based upon preliminary project design. Minor adjustments in boundaries, acreages, and management techniques and methods may be made during sale layout and project implementation, depending upon actual ground conditions. The Interdisciplinary Team which did the Jim's Creek Savanna Restoration Project analysis will review any major differences between the specifications in the EA and the final layout and any proposed changes in methods to determine if the environmental effects or resulting environmental conditions will be different than those disclosed in the EA. If so, the procedures described in FSH 1909.15, section 18.4, Reconsideration of Decisions Based upon an EA, will be followed.

If no appeal is filed, the USDA Forest Service will begin implementation of the Jim's Creek Savanna Restoration Project five days after the close of the forty-five day appeal period, which starts on the date the legal notice announcing this decision appears in the *Register-Guard*, Eugene, Oregon. If an appeal is filed, implementation of this decision will occur 15 days following the date of the appeal disposition.

For further information concerning the Jim's Creek Savanna Restoration Project contact Chip Weber, Middle Fork District Ranger, or Tim Bailey, Resource Planner at the Middle Fork Ranger Station; telephone number (541) 782-2283 during normal business hours.

Approved by:

Dallas Emch  
Forest Supervisor  
Willamette National Forest

Date: August 22, 2006



